ICOM

ICOM COMMUNICATION INTERFACE
CI-Ⅳ/CI-V CONVERTER

UX-14

INSTRUCTION MANUAL

この取扱説明書は英文と共用です。
日本語については18ページからご覧ください。

INTRODUCTION

The **UX-14 CI-IV/CI-V CONVERTER** is designed for converting an ICOM communication I/O port from a CI-IV (Parallel I/O port) to the advanced CI-V (Serial I/O port).

The **ICOM COMMUNICATION INTERFACE-V (CI-V) SYSTEM** is a remote control local area network with CSMA/CD (Carrier Sense Multiple Access with Collision Detection) standard, allowing easy computer control of a variety of modern ICOM equipment.

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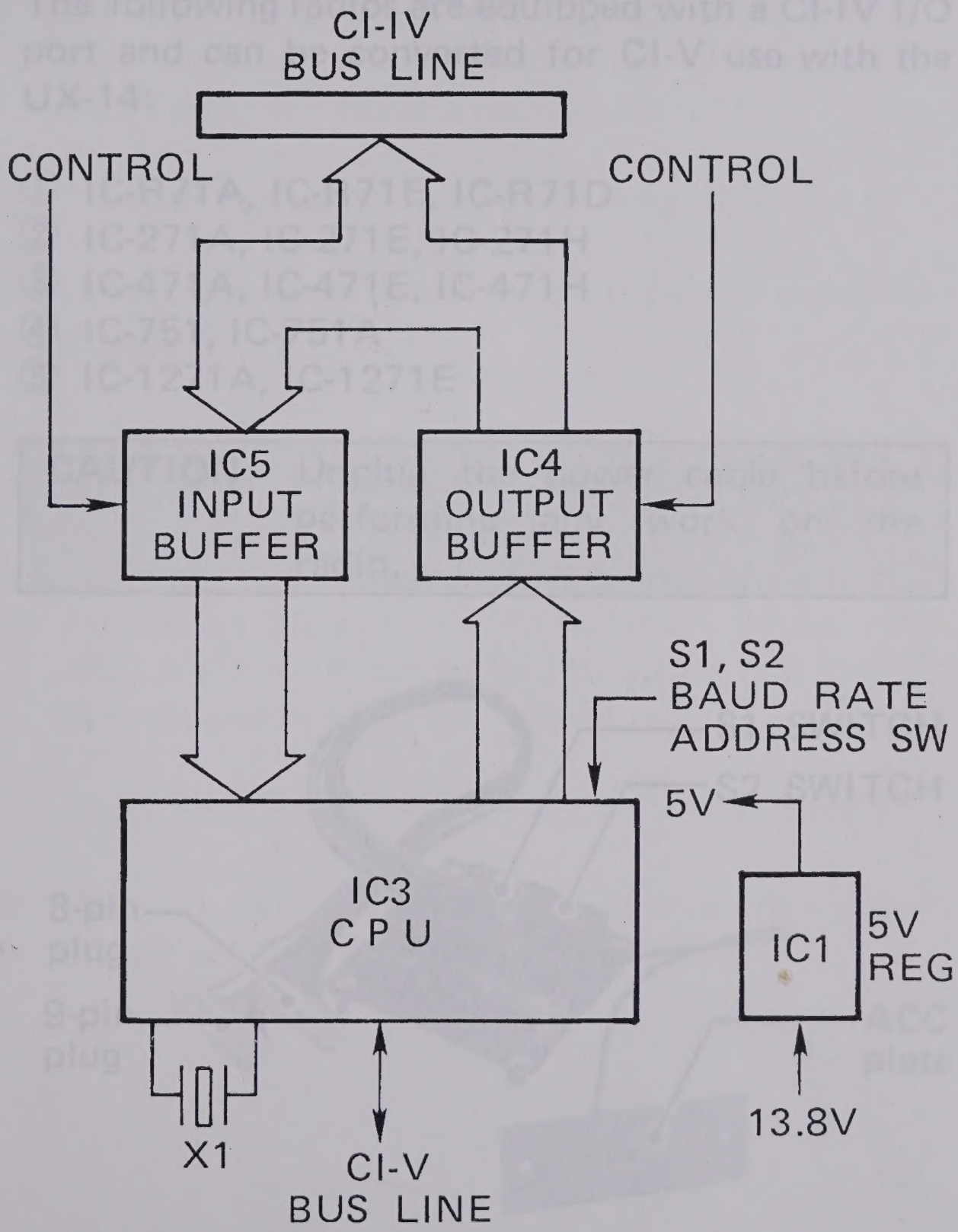
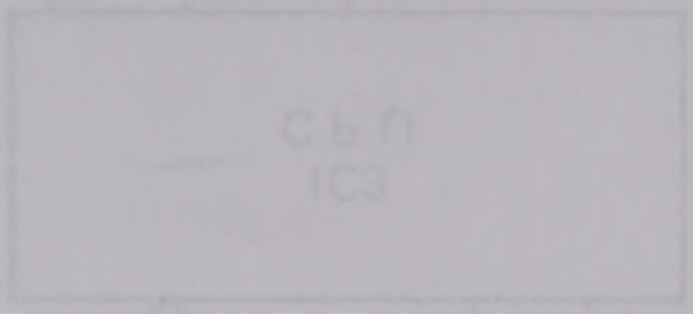
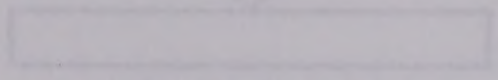
BLOCK DIAGRAM





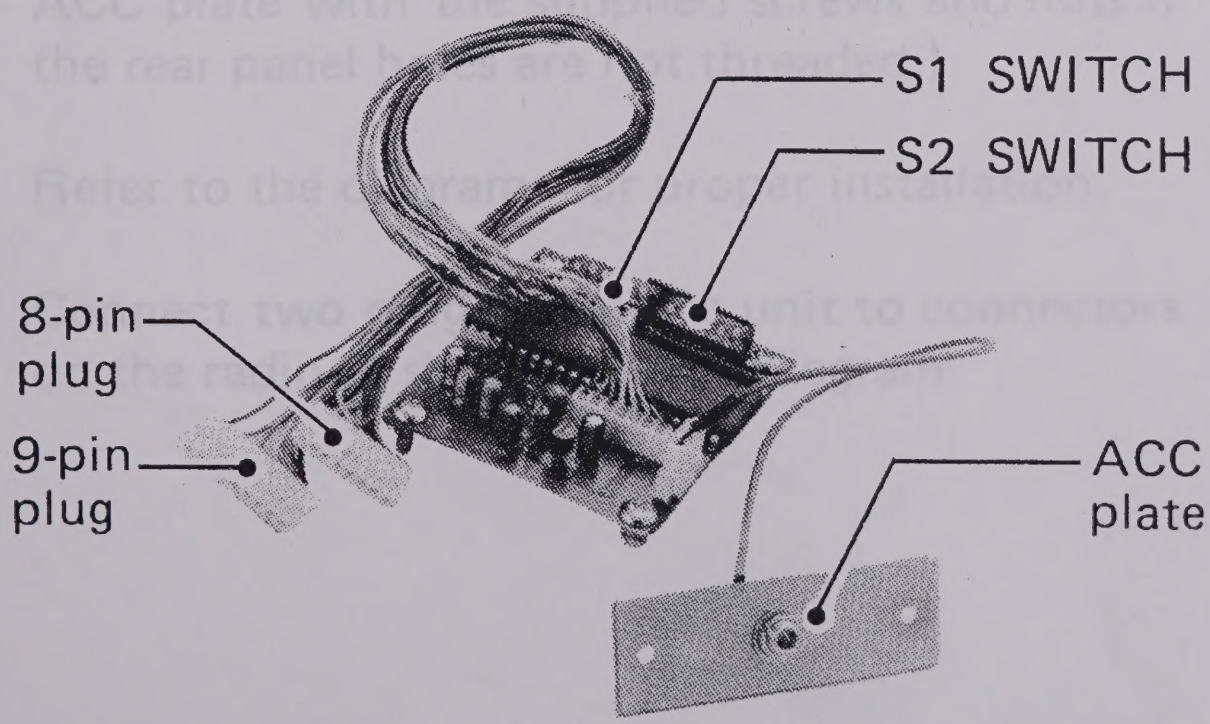


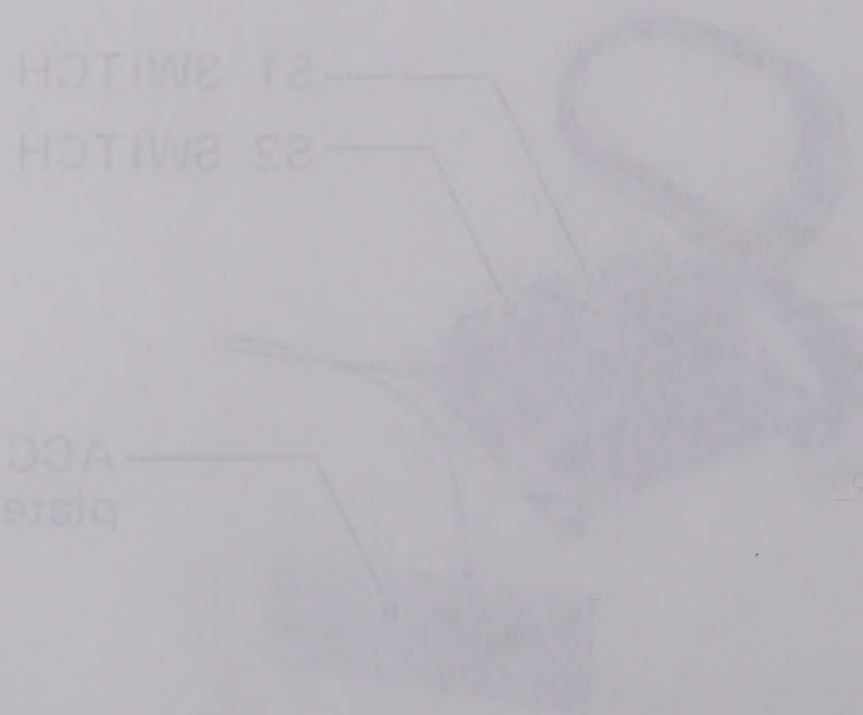
INSTALLATION

The following radios are equipped with a CI-IV I/O port and can be converted for CI-V use with the UX-14:

① IC-R71A, IC-R71E, IC-R71D
② IC-271A, IC-271E, IC-271H
③ IC-471A, IC-471E, IC-471H
④ IC-751, IC-751A
⑤ IC-1271A, IC-1271E

CAUTION: Unplug the power cable before performing any work on the radio.





1) Set the S1 and S2 SWITCHES according to your particular radio requirements. See section SETTING DIP SWITCHES below.

2) Remove the bottom cover of the radio.

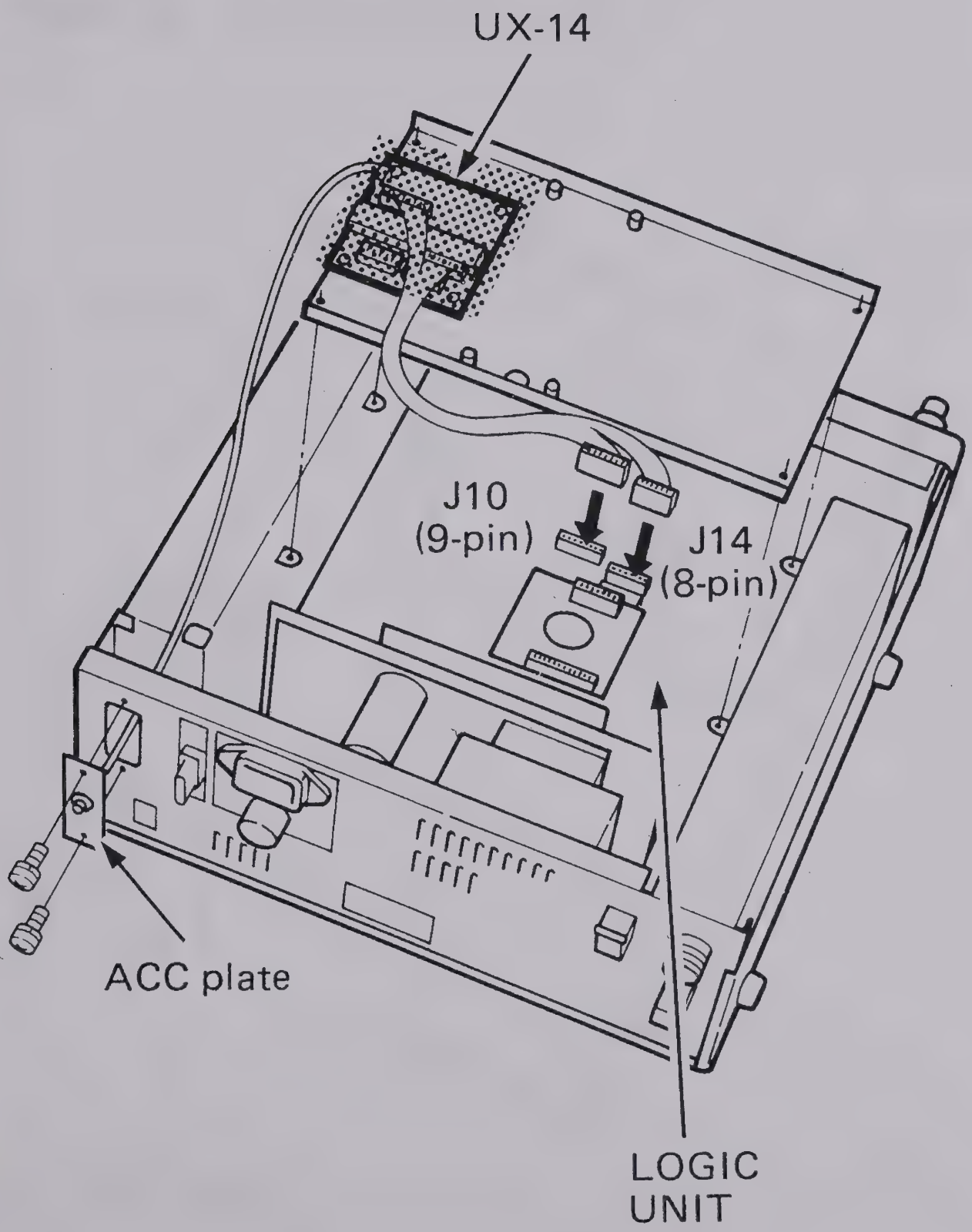
3) Orient the unit correctly and use the supplied screws.

4) Remove the metal plate or rubber cover attached to the rear panel and pass the connector inward onto the bottom side.
The metal plate with a remote jack (ACC plate) should be attached with screws. (Install the ACC plate with the supplied screws and nuts if the rear panel holes are not threaded.)

   Refer to the diagrams for proper installation.

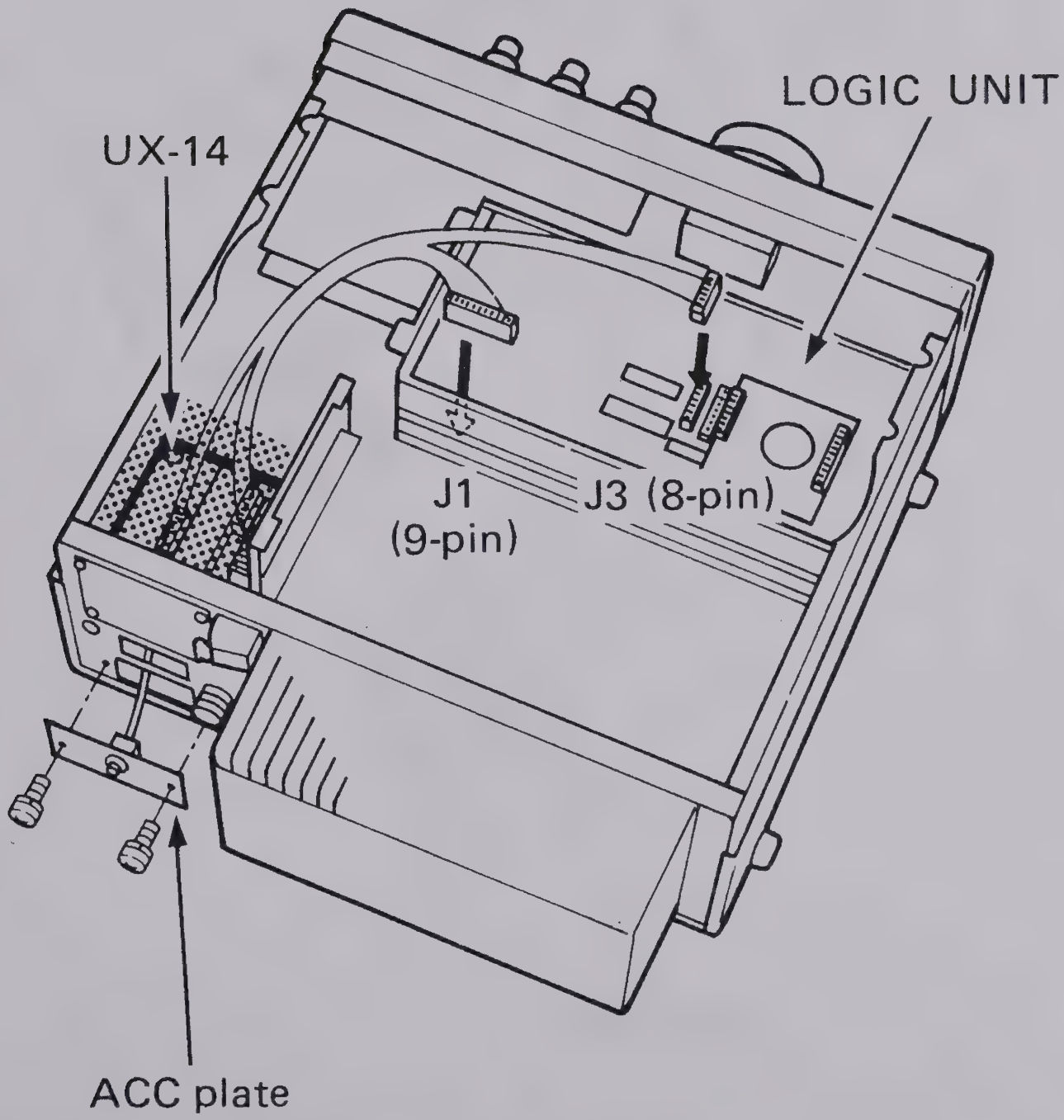
5) Connect two plugs from the unit to connectors on the radio as shown in each diagram.

- Connection with IC-R71A/E/D receivers.
- 接続方法　IC-R71

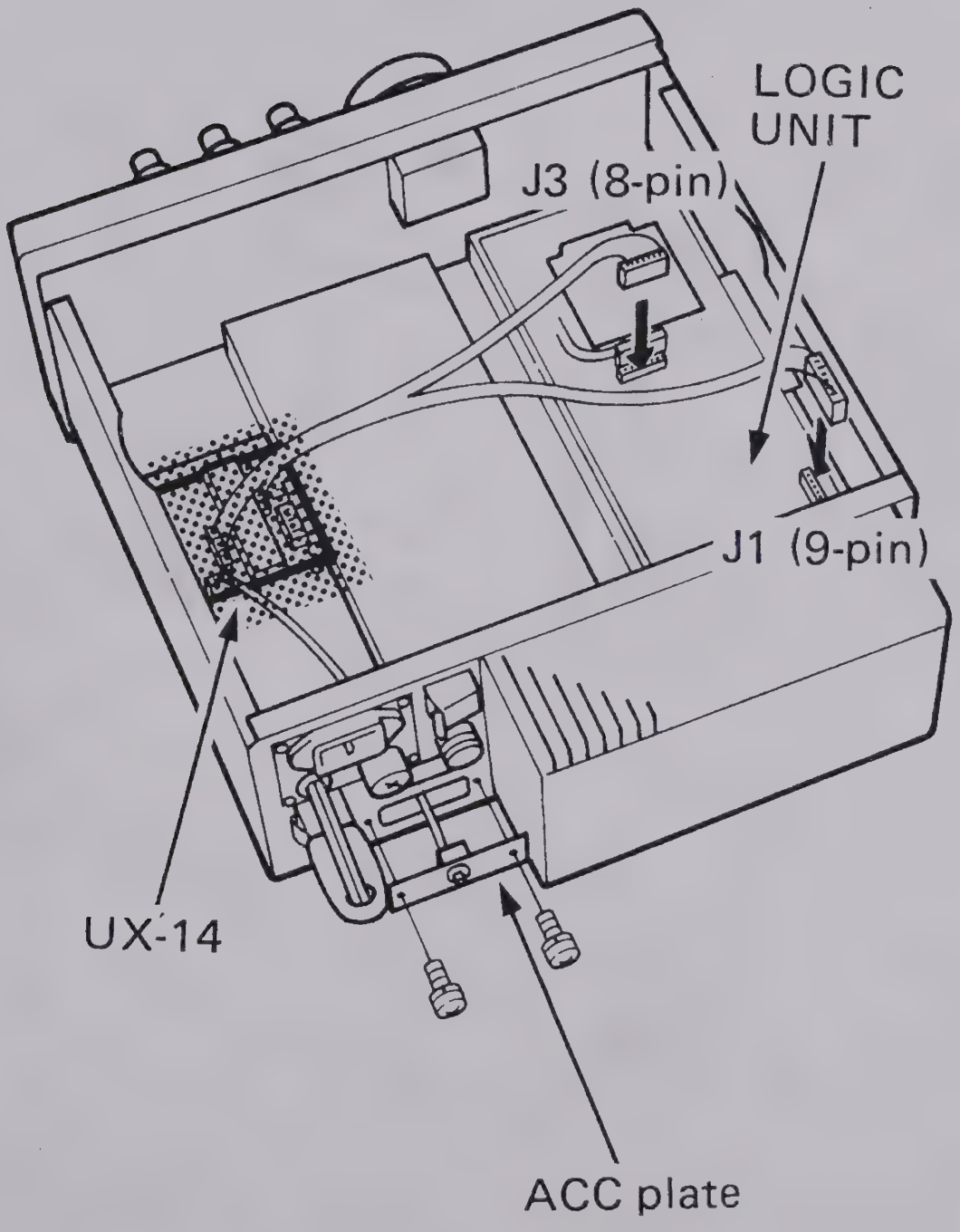


- Connection with IC-271A/E, IC-471A/E and IC-1271A/E transceivers.

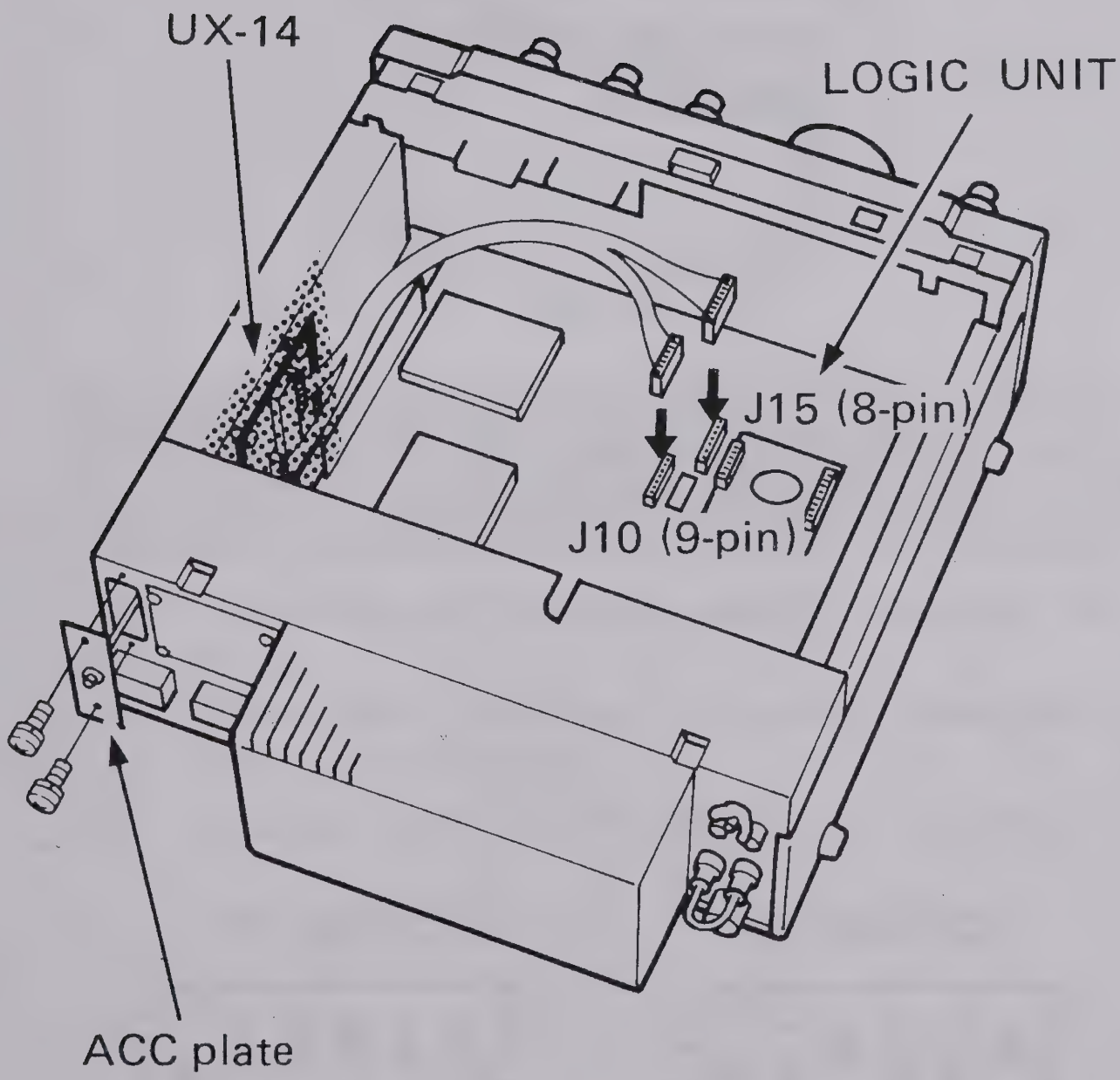
- 接続方法　IC-271, IC-371, IC-1271



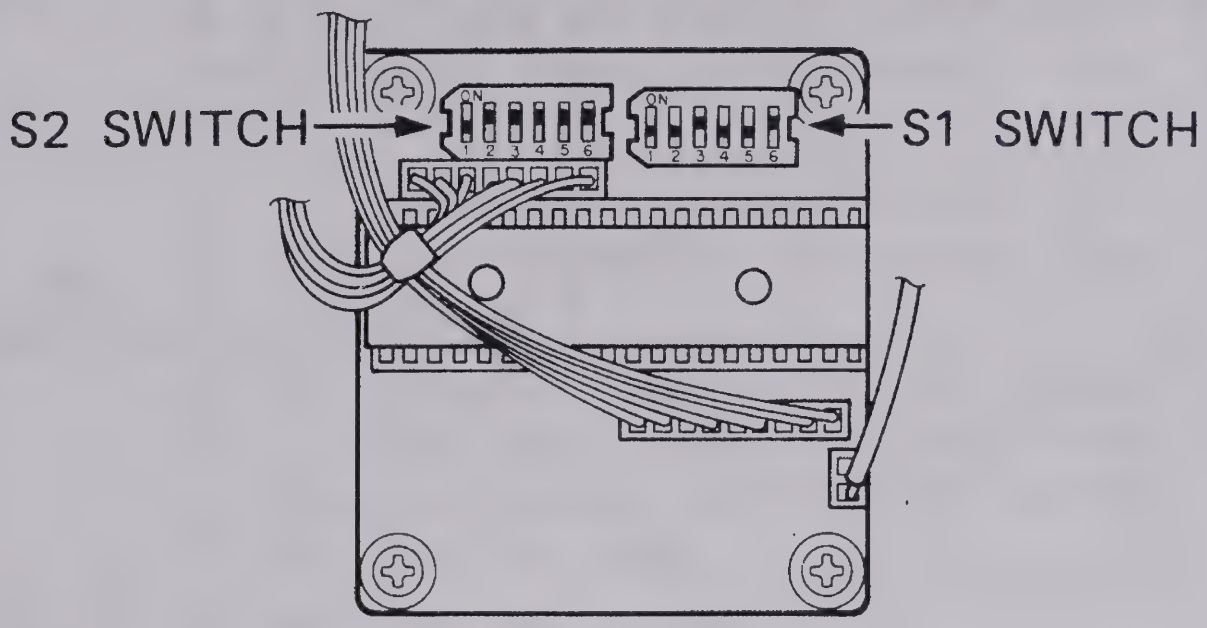
- Connection with IC-471H and IC-271H transceivers.
- 接続方法　IC-271D, IC-371D



- Connection with IC-751 and IC-751A transceivers.
- 接続方法　IC-750/S, IC-750A/AS



SETTING DIP SWITCHES

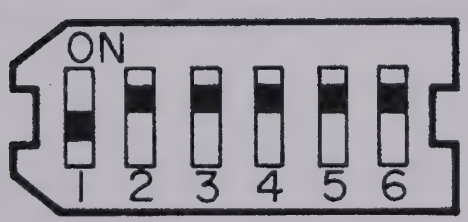


UX-14

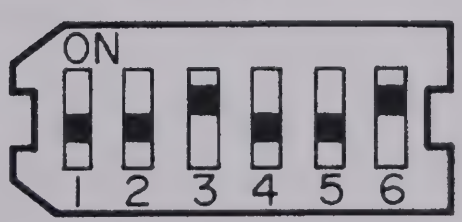
CAUTION: All dip switches MUST be set before installing the UX-14

- The following are example switch positions for S1 and S2.
  S1: Baud rate is 1200bps, transceive function is ON for IC-1271A/E.
  S2: Address is set at 24H (36) for IC-1271A/E.

S1 SWITCH



S2 SWITCH



DIP SWITCH		FUNCTION
S1 SWITCH	1	These switches can select baud rate (data transfer rate). See Table 3.
	2	
	3	This switch turns ON and OFF the transceive operation. See Table 4.
	4	These switches set the band for each radio and MUST be set before turning ON power to the radio.
	5	
	6	

Table 1 S1 SWITCH designation.

- **Bracketed figures ( ) are decimals and figures marked with an H are hexadecimals.**

DIP SWITCH		FUNCTION
S2 SWITCH	1~6	These switches are designated for CI-V addresses. An address can be selected from 01H ~ 3FH (01 ~ 63). For your convenience we recommend setting the radios to the ICOM standards shown in Table 6.

Table 2 S2 SWITCH designation.

(1) SETTING THE S1 SWITCH

• DIP SWITCHES 1 AND 2

NOTE: The standard ICOM CI-V baud rate is 1200bps.

S1 SWITCH		BAUD RATE (bps)
1	2	
OFF	OFF	- - - - -
ON	OFF	9600
OFF	**ON**	**1200**
ON	ON	300

Table 3 Baud rate setting.

• DIP SWITCH 3

S1 SWITCH	FUNCTION
3	
ON	Activates transceive operation. Data are sent out when each parameter is changed.
OFF	For independent control using a personal computer. Data are sent out when commands are received.

Table 4 Transceive operation ON-OFF.

• DIP SWITCHES 4, 5 AND 6.

	S1 SWITCH			TYPE OF RADIO	
	4	5	6	RADIO	BAND
*①	OFF	OFF	OFF	IC-751, IC-751A	HF
*②	OFF	ON	OFF	IC-R71A, IC-R71E, IC-R71D	
③	OFF	OFF	ON	IC-751, IC-751A	
④	OFF	ON	ON	IC-R71A, IC-R71E, IC-R71D	
⑤	ON	OFF	ON	IC-271A, IC-271E, IC-271H	144MHz
⑥	ON	ON	OFF	IC-471A, IC-471E, IC-471H	430MHz
⑦	ON	ON	ON	IC-1271A, IC-1271E	1.2GHz

***IMPORTANT:** Dip switches, 4, 5 and 6 must be set as 1 or 2 when IC-751 or IC-R71 series radios are connected to the IC-735 for using the transceive operation.

Table 5 Radio type setting.

(2) SETTING THE S2 SWITCH

The S2 SWITCH consists of six dip switches. These switches are designated for CI-V addresses which can be selected from 01H ~ 3FH (1 ~ 63).

The following addresses in Table 6 are ICOM standard addresses. Set the addresses for each radio as shown in the diagrams.

NOTE: Address 00H (00) is inhibited since it is already reserved for another function.

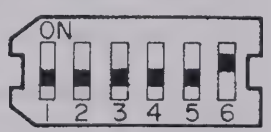
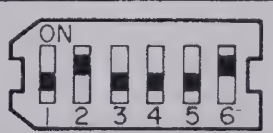
RADIO	ADDRESS	SWITCH SETTING
IC-751/A	1CH (28)	
IC-R71A/E/D	1AH (26)	
IC-271A/E/H	20H (32)	
IC-471A/E/H	22H (34)	
IC-1271A/E	24H (36)	

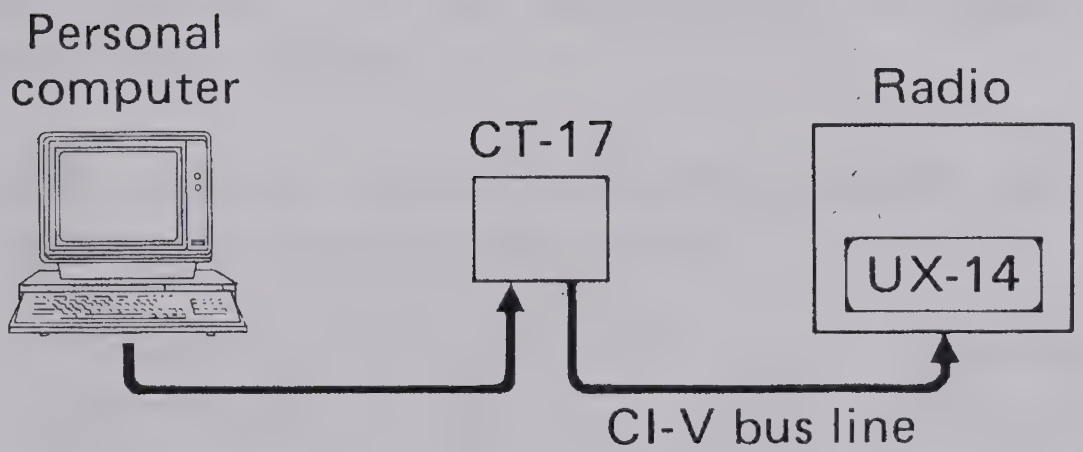
Table 6 CI-V addresses recommended.

OPERATION EXAMPLES

(1) CONTROL USING A COMPUTER

The radios listed above can be controlled by using an optional CT-17 CI-V LEVEL CONVERTER with a computer equipped with an RS-232C I/O port. CT-17 can be connected to a maximum of 4 radios.

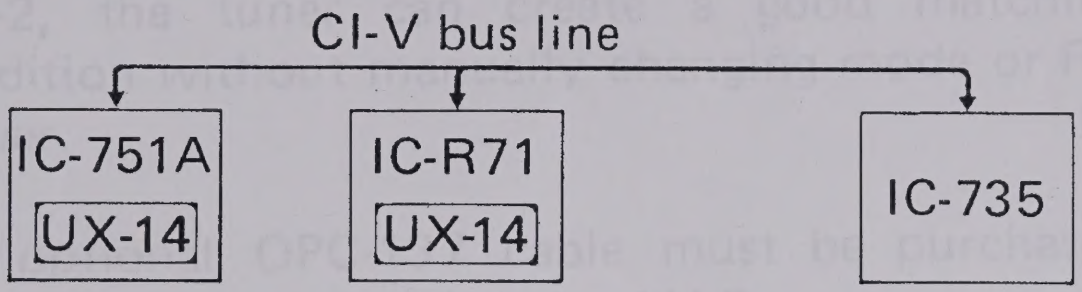
- Frequency, mode and memory channels can be controlled.



Controlling a radio using a personal computer through the CT-17.

(2) TRANSCEIVE OPERATION

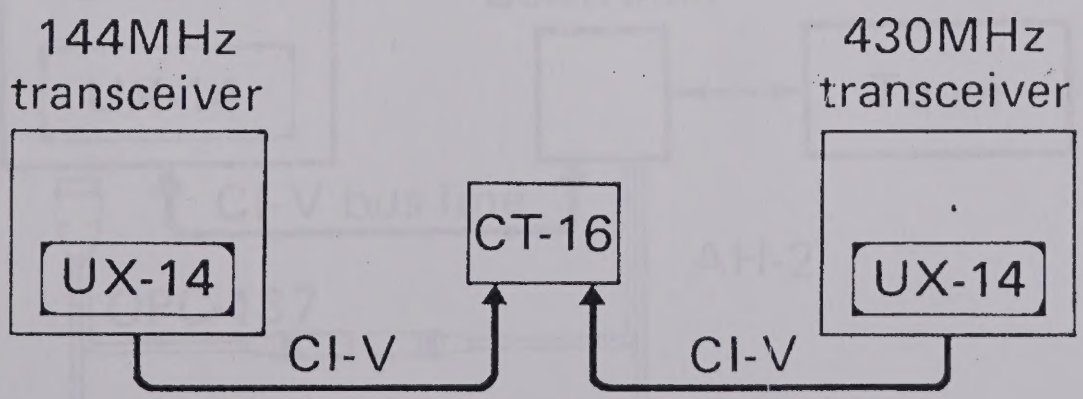
Each radio frequency can track another when two or more of the same band transceivers in series are connected using the CI-V REMOTE JACK. Dip switch 3 on S1 must be placed in the ON position.



(3) SATELLITE OPERATION

The 144MHz and 430MHz transceivers listed in Table 5 can be adapted for satellite operation using the optional **CT-16 SATELLITE INTERFACE UNIT** from ICOM.

* Dip switch 3 on the S1 SWITCH **MUST BE OFF** when using satellite operation.



Example connection for satellite communications using the CT-16.

(2) TRANSCEIVE OPERATION

Each radio frequency can track another when two or more of the same band transceivers in series are connected using the CI-V REMOTE JACK. Dip switch 3 on S1 must be placed in the ON position.

(3) SATELLITE OPERATION

The 144MHz and 430MHz transceivers listed in Table 5 can be adopted for satellite operation using the optional CT-16 SATELLITE INTERFACE UNIT from ICOM.

* Dip switch 3 on the S1 SWITCH MUST BE OFF when using satellite operation.

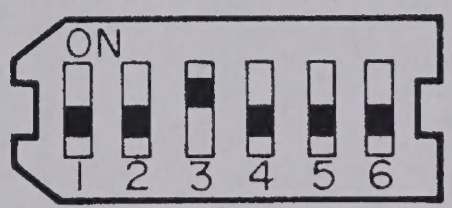
Example connection for satellite communications using the CT-16.

(4) AH-2 ANTENNA TUNER OPERATION

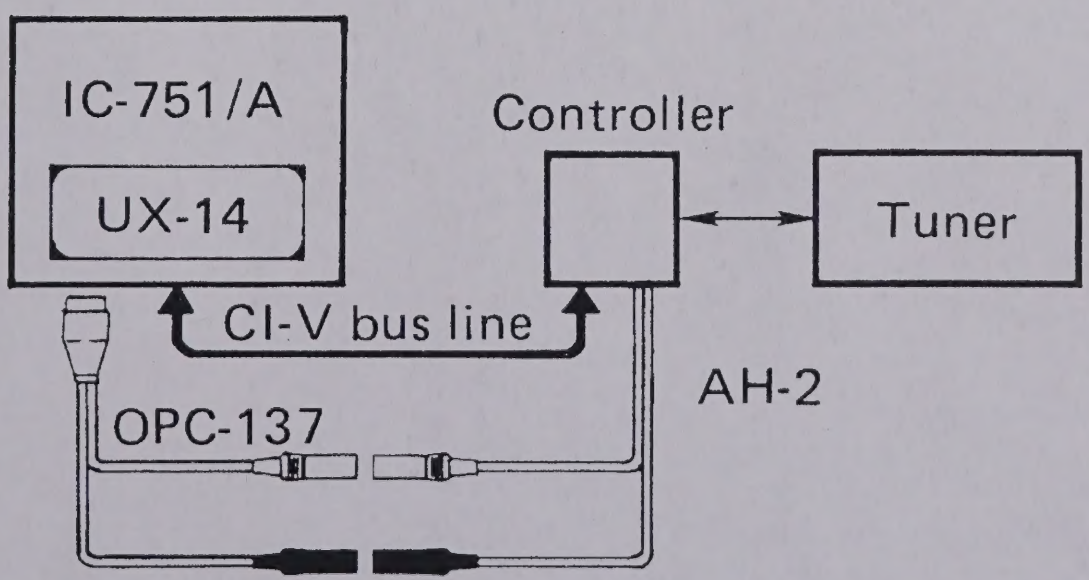
The AH-2 HF ALL BAND ANTENNA TUNER can be automatically operated with the IC-751 or IC-751A. By pushing the [TUNE] SWITCH on the AH-2, the tuner can create a good matching condition without manually changing mode or RF power.

An optional OPC-137 cable must be purchased separately for connecting the AH-2.

The S2 SWITCH **MUST** be set as shown at right when using the AH-2:



S2 SWITCH

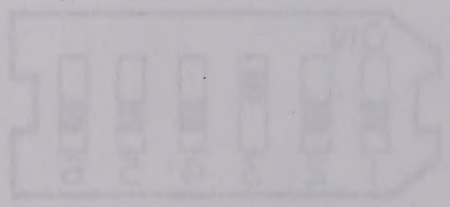


(4) AH-2 ANTENNA TUNER OPERATION

The AH-2 HF ALL BAND ANTENNA TUNER can be automatically operated with the IC-751 or IC-751A. By pushing the [TUNE] SWITCH on the AH-2, the tuner can create a good matching condition without manually changing mode or RF power.

An optional OPC-137 cable must be purchased separately for connecting the AH-2.

The S2 SWITCH MUST be set as shown at right when using the AH-2:



S2 SWITCH